SMIF (S133) polyclonal antibody

Catalog: BCP01543 Host: Rabbit Reactivity: Human,Mouse,Rat

BackGround:

Signal transduction of TGF-β superfamily members is regulated by Smad proteins. In particular, Smads influence specific gene transcription by relaying signals from the cell membrane to the nucleus. Smad4 plays an essential role in TGF-β-induced transcriptional activation wherein phosphorylated receptor-associated Smads associate with Smad4. Furthermore, SMIF (Smad4-intereacting protein) and Smad4 complex with TGF-β and BMP4. An increase in Smad4 concentration increases the translocation of this complex to the nucleus. SMIF and Smad4 interact directly through a EVH1/WH1 domain on SMIF and a proline-rich activation domain on Smad4. Smad4 is essential to nuclear translocation of SMIF as deletion of the Smad4-interacting domain (located in the N-terminal 100 amino acids) of SMIF eliminates TGF-β-induced nuclear translocation of SMIF (1). The human SMIF gene is ubiquitously expressed and encodes a protein with a relative molecular mass of 70 kDa.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 75 kDa

Swiss-Prot:

Q9NPI6

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

IHC: 1:50~1:200

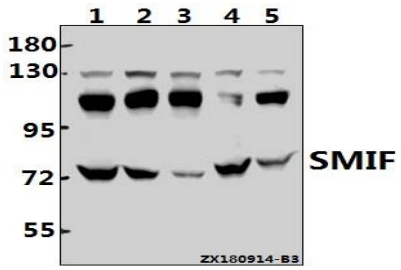
Storage&Stability:

Store at 4℃ short term. Aliquot and store at -20℃ long term. Avoid freeze-thaw cycles.

Specificity:

SMIF (S133) polyclonal antibody detects endogenous levels of SMIF protein.

DATA:



Western blot (WB) analysis of SMIF (S133) pAb at 1:500 dilution

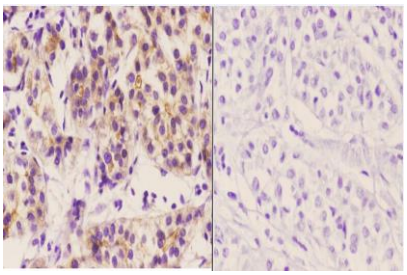
Lane1:HEK293T whole cell lysate(40ug)

Lane2:HepG2 whole cell lysate(40ug)

Lane3:H1792 whole cell lysate(40ug)

Lane4:AML-12 whole cell lysate(40ug)

Lane5:PC12 whole cell lysate(40ug)



Immunohistochemistry (IHC) analyzes of SMIF (S133) pAb in paraffin-embedded human liver carcinoma tissue at 1:50.showing cytoplasmic and nucleus staining. Negative control (the right)Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.

Note:

For research use only, not for use in diagnostic procedure.